compounds are cleavable by the first enzyme moiety of the first bispecific reagent, the material remaining after cleaving at position 3 being a soluble reactive intermediate molecule which is adapted to be oxidized and dimerized thereby forming the first extra-cellular precipitate.

REMARKS

Reconsideration and allowance are respectfully requested.

Claims 1,5,6,8,13,23,26,27,29,34,40-43,47,51,55,69,70,72,75, and 76 have been amended herein to provide a better definition of the invention.

In Section 4 of the Action, the phrase "at least" is alleged to be of "indefinite nature". In view of this objection, in claim 1, the paragraph beginning with the word "administering" the recitation of "having at least one of a first" has been deleted and a Markush group of an epitope, a second antigenic epitope, and a neo-antigenic epitope has been provided

In view of the objection in Section 5 of the Action to the recitation in claim 1, in the paragraph beginning "additionally introducing", of the recitation of "epitopes as (a), (b), and (c), claim 1 has been amended to delete "for at least one of" and a Markush group of the first, second, and neo-antigenic third antigenic third epitopes has been provided.

In view of the objection in Section 5 of the Action of "at least" and the objection to the recitation of antigenic epitopes identified as (a), (b), and (c), a Markush groups of the first, second, and the neo-antigenic third epitope has been

provided. It is submitted that this objection has been overcome by this amendment to claim 1.

As to Section 6 of the Action, it is submitted that in view of the amendments to claim 1 to the paragraph beginning "additionally introducing", the objection has been overcome.

In Section 7 of the Action, it is alleged that "the first therapeutic agent is (a) a soluble agent selected from a group of agents (claim 5) and (b) a soluble moiety and an insoluble moiety (claim 18). In view of the objection in Section 7, claim 5 which depends on claim 1 has been amended to recite a Markush group for the first therapeutic agent.

With respect to the objection in Section 8 of the Action, again claim 5 has been amended to recite a Markush group.

With respect to Section 9 of the Action, again claim 5 has been amended to recite a Markush group.

In view of the objection in Section 10 of the Action regarding the molecular positions 1-7 of the indoxyl compounds, claim 5 has been amended to recite a Markush group.

With respect to Section 11 of the Action, claim 13 has been amended to recite a Markush group of indoxyl compounds identified as (a), (b), and (c) in Section 11.

With respect to Section 12 of the Action, it is submitted that this therein recitations should properly refer to (a) of Section 7 and (e) of Section 8 of the

Action.

The objection in Section 12 relating to claims 14-17 and 62 is responded to by the amendment to claim 5 upon which claims 14-17 and 61 directly or indirectly depend.

It is submitted that Section 13 of the Action has been responded to similarly as Section 12 discussed above.

With respect to Section 14 of the Action, it is submitted that in response to the objection therein, claim 6 has been amended to delete "inherently" modifying "cell impermeant".

With respect to Section 15 of the Action, it is noted that claim 8 has amended to recite a Markush group.

With respect to Section 16, it is noted that claims 19, 20, and 21 depend upon claim 1 which recites Markush groups.

With respect to the objection in Section 17 of the Action in, it is noted that claims 23-25 depend upon claim 1 having the Markush groups.

In view of the objection in Section 18 of the Action, claim 26 has been amended to recite a Markush group for the radioactive toxic agent which is an organic chemical selected from the group consisting of peptides, etc., claims 30 and 39 depend upon claim 1 having the Markush groups.

In view of the objection in Section 19 of the Action, claim 29 has been amended to recite a Markush group of the cell-impermeant chemical being selected from the group consisting of materials having a molecular weight of 1000 daltons.

In view of the objection in Section 21 of the Action, claim 26 has been amended to recite "a Markush group of the radioactive toxic agent being an organic chemical selected from the group consisting of peptides, etc.

In view of the objection in Section 22 of the Action, again claim 26 has been amended to recite that the soluble radioactive toxic agent which is an organic chemical selected from a Markush group consisting of peptides, etc.

In view of the objection in Section 23 of the Action, claim 34 has been amended to recite that the indoxyl compounds are selected from the Markush group consisting of indoxyl-penicillin, etc.

In view of the objection in Section 24 of the Action, again it is submitted that claim 34 has been amended to recite that the indoxyl compounds are selected from a Markush group consisting of indoxyl-penicillin, etc.

In view of the objection in Section 25 of the Action, it is submitted that since claim 36 depends upon claim 26, the recitation above regarding claim 26 is equally applicable to claim 35, as well as to claims 36, 37, and 38.

Regarding the objection in Section 25 of the Action with respect to claim 35, it is again submitted that claim 35 which depends upon claim 26 is distinguished as claim 26 above.

The recitations herein regarding claims 35-38 in view of Section 26 of the Action are equally applicable.

In view of the objection in Section 29 of the Action, claim 43 has been amended to recite that the first moiety has an affinity for an epitope selected from

a Markush group consisting of the first antigenic epitope, etc.

The recitation above regarding claim 43 is equally applicable to claims 44-46 which depend upon claim 43.

In view of the objection in Section 30 of the Action, claim 44 has been amended to recite that the first moiety has an affinity for an epitope selected from a Markush group consisting of the first antigenic epitope, etc.

In view of the objection in Section 31 of the Action, claim 51 has been amended to recite that the first moiety has an affinity for an epitope selected from a Markush group consisting of the first antigenic epitope, etc. It is noted that claim 52,53,54 depend upon amended claim 51.

Regarding the objection in Section 33 of the Action, claim 69 has been amended to recite that the first therapeutic agent is selected from a Markush group consisting of peptides, etc. Claim 69 has been further amended to recite that the first extra-cellular precipitate has an epitope selected from a Markush group consisting of a first antigenic epitope, etc.

Claims 76 which depends upon claim 69 has been amended to recite that each of the indoxyl compounds includes a compound selected from a Markush group consisting of indoxyl-penicillin, etc.

It is noted that claims 77-81 depend upon amended claim 69.

The objections in Sections 34-43 of the Action which relate to claim 69 and claims 70-83 dependent thereon have been addressed above with respect to Sections 33-35.

The objections in Section 44 are addressed to a second claimed composition, namely the bispecific reagent of claim 84.

In response to the requirement of restriction to one of the inventions identified as Groups I-XV on pages 2 and 3 of the Action, the Applicant hereby provisionally elects the invention of Group XIV which the Action indicates includes claims 69-83 drawn to a composition of therapeutic agent and a bispecific reagent classified in Class 530, Sub-class 402.

The requirement of restriction to one of the inventions identified by the Examiner as Groups I-XV is hereby respectfully traversed.

In response to the requirement of an election of species of Groups XIV, the Applicant in view of Sections 35 and 36 of the Action provisionally elects the alleged species of claim 76.

The requirement of an election of species is hereby respectfully traversed.

It is submitted that independent claim 1 for a method for treating a heterogeneous population of cancer cells in a living host is a single invention upon which claims 2-68 depend. By the definition set forth in MPEP 801.01, the inventions identified by the Examiner as Groups I-XIII are <u>not</u> independent inventions since they are connected in design, operation, or effect, as disclosed in the application.

As further pointed out in MPEP 808.01 the situation of independent inventions being claimed is rarely presented since persons seldom file an application containing disclosures of independent things.

As set forth in MPEP 802.01, the term "independent" means that there is no disclosed relationship between the two or more subjects disclosed, that is they are unconnected in design, operation, or effect. Again it is clear that every claim in Groups I-XIII is directed to a single method for treating a heterogeneous population of cancer cells in a living host.

As further defined in MPEP 802.01, the term "distinct" means that two or more subjects as disclosed, are related, for example, as combination and part (sub-combination) thereof, process and apparatus for its practice, process and product made, etc., but are capable of separate manufacture, use, or sell as claimed and are patentable (novel and unobvious over each other). Clearly claims 1-68 to the process are not capable of separate use as claimed, notwithstanding that they are patentable, that is novel and unobvious, over each other.

As set forth in MPEP 803.01, there are two criterias for proper requirement for restriction between patentable distinctive inventions; the inventions at (1) the inventions must be independent or distinct as claimed; and (2) there must be a serious burden on the Examiner if restriction is not required.

As set forth in MPEP 803.02 regarding Markush-type claims, if the members of Markush group are sufficiently few in number or so closely related that a search and examination of the entire claim can be made without serious burden, the Examiner must examine all claims on the merits, even though they are directed to independent and distinct inventions.

Group XIV including claims 69-83 is recited as being drawn to a composition of a therapeutic agent and a bispecific reagent classified in Class 530, Sub-class 402. In Group XV claim 84 is identified as being drawn to a bispecific reagent classified in Class 530, Sub-class 402. It is further recited on page 4 of the Action, that the inventions of Group and XV represent chemically distinct products obtained by and used in different methods.

To the contrary, it is clear that claim 69 is to a first "therapeutic agent" and claims 70-83, directly or indirectly dependent thereon, are unequivocally part and parcel of the method of claim 1 which recites "administering to the living host the first therapeutic agent, which is a soluble precipitable material".

Claims 84-87 of Group XV again are unequivocally directed to the bispecific reagent, the use of which is essential to the method of claim 1.

Contrary to what is recited on page 4 of the Action, there is nothing in claims 69-87 which is directed to a method of obtaining a first therapeutic agent or a bispecific reagent. Furthermore, there is nothing in the Action to show that the first therapeutic agent and the bispecific reagent can be or are used in methods different than that of claim 1.

Contrary to what is recited on page 4 of the Action, MPEP 806.05(h) recites that a product and process of using the process can be shown to be distinct inventions if either or both of the following can be shown (1) a process for using as claimed can be practiced with another material different product. There is no showing in the Action that the process of the method or method of claim 1 can be

practiced by using another materially different product from that of the first therapeutic agent of claim 69. The same is true for the bispecific reagent of claim 84.

Furthermore, MPEP 806.05(h) recites in (2), that the product as claimed can be shown to be a distinct invention of the product can be used in a materially different process. There is no such showing in the Action. The recitation of affinity chromatography on page 4 of the Action fails to show such other use. Thus in response to the recitation on page 4 of the Action that the bispecific reagent and the therapeutic agent of the composition as claimed can be used in a materially different process of using the product, for example "affinity chromatography", it is submitted that the there is no showing or suggestion of the bispecific reagent and the therapeutic agent in use in chromatography which is defined as a separation method whereby individual chemical compounds which were originally present in a mixture are resolved from each other by a selective process of distribution between two heterogenous (immiscible) phases.

Chemical affinity is loosely used to express a tendency for a mixture of substances to react chemically. The free energy decrease is a quantitative measure of chemical affinity.

In chromatography the greater the affinity of a particular chemical compound (referred to as the solute) for the stationery medium, the longer it will be retained in the system. Again it appears to be totally irrelevant to cite "affinity chromatography" in support of the allegation that the process of claim 1 can be

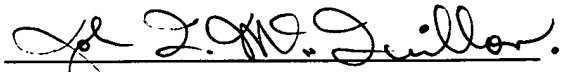
used with products materially different from those of claims 69 and 84. It is respectfully submitted that the recitations in the Action of Sections 4-32 lead to allegations of such a number of species to which no response can be made. It would be virtually impossible to prepare a truth table of the allegations of species.

It is submitted that the claims have been amended herein to provide a better definition of the invention and to attempt to respond to the allegation of multiple species for each of the inventions identified as groups I-XIII by including Markush groups.

It is submitted that the objection to the recitation of "at least one of" is of an "indefinite nature" is unsupported by the Rules and the MPEP. The phrase "at least one of" is a conventional and accepted way of reciting the occurrence in a claim of an element of a plurality of elements without reducing the claim to a claim in the alternative.

It is respectfully requested that the requirements of restriction be reconsidered in view of this Amendment and that the examination of both the process of claim 1 et al and the products of claims 69 and 84 which are used in the process of claim 1 remain under consideration and be given examination on the merits thereof.

Respectfully submitted,



Dated: September 23, 1997

John Q. McQuillan
Reg. No. 19,805